# UNITED STATES PATENT AND TRADEMARK OFFICE

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| 09/772,126 | 01/29/2001 | Edward Peter Imes | D/A0759 690-009618-US(PAR | 5123 |

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| EXAMINER |
|---|
| THOMPSON, JAMES A |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2624 | |

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL.**      2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-15* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>29 January 2001</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

## DETAILED ACTION

### *Drawings*

1.      The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4)

because reference character "42" has been used to designate both the "Text Only"

button and the "Graphics Only" button in the graphical user interface (40) shown in

figure 2.  Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in

reply to the Office action to avoid abandonment of the application. Any amended

replacement drawing sheet should include all of the figures appearing on the immediate

prior version of the sheet, even if only one figure is being amended. The replacement

sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR

1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not

accepted by the examiner, the applicant will be notified and informed of any required

corrective action in the next Office action. The objection to the drawings will not be held

in abeyance.

### *Claim Rejections - 35 USC § 112*

2.      Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

Claim 15 states that "the text only device is adapted to inhibit a printing of

information from a scanned document that exceeds a predetermined size."  Is the

printing of the entire scanned document inhibited if the scanned document exceeds a

predetermined size, or is it the information within the scanned document that is inhibited

if said information exceeds a predetermined size?  The specific language of the claim is

indefinite and should be modified so that this issue is made clear.

### *Claim Interpretations*

3.     For the purpose of examining the claims over the prior art, the following

interpretation was made:

Claim 15 is interpreted to mean that the information within the scanned document

is inhibited from being printed if said information exceeds a predetermined size.  This

interpretation is supported by the specification and the language of claim 6, which is

similar.

### *Claim Rejections - 35 USC § 102*

4.     The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5.     Claims 1, 4-8, 10-12 and 14-15 are rejected under 35 U.S.C. 102(b) as being

anticipated by Bloomberg (US Patent 5,202,933).

**Regarding claim 1:** Bloomberg discloses a document reproduction system

(figure 1A of Bloomberg) comprising an electronic reprographic apparatus (figure 1A(8)

and column 6, lines 1-5 of Bloomberg).

Said system further comprises a controller (figure 1A(6) of Bloomberg), the

controller including an image manipulation device (figure 1A(6(part)) of Bloomberg)

adapted to screen out unwanted images (column 5, lines 17-21 of Bloomberg) from a

document being reproduced (column 5, lines 35-37 of Bloomberg). The computer

processor (figure 1A(6) of Bloomberg) performs the overall image processing of the

system (column 5, lines 57-62 of Bloomberg). Therefore, the image manipulation

device corresponds to the portion of the computer processor, along with the associated

embodied software, that performs the operations corresponding to said image

manipulation device.

**Regarding claim 4:** Bloomberg discloses that said image manipulation device is

adapted to separate text from images in the document (figure 12A; figure 12C; and

column 5, lines 17-21 of Bloomberg) and send only the text to an image output device

for printing (column 5, lines 35-37 of Bloomberg).

**Regarding claim 5:** Bloomberg discloses that the unwanted images include

borders, frames and pictures (figure 12A; figure 12C; and column 13, lines 25-34 of

Bloomberg). Figure 12A of Bloomberg represents the original image (column 13, lines

25-28 of Bloomberg). Figure 12C represents the resulting text after the graphics have

been removed (column 13, lines 31-34 of Bloomberg). As can be seen from figures 12A

and 12C of Bloomberg, the picture of the graph is removed along with the border

around said graph. Said border can also be considered a frame since said border defines a rectangular region around said picture. Further, since the system of Bloomberg removes all line graphics and retains only the text region (column 13, lines 31-34 of Bloomberg), all pictures, borders and graphics are removed using said system.

**Regarding claim 6:** Bloomberg discloses that said controller is adapted to screen out images that exceed a predetermined size from the document being reproduced (column 6, lines 16-21 of Bloomberg). Large ON regions and finely textured regions are first removed from the image (column 6, lines 16-21 of Bloomberg), leaving the smaller regions to be processed afterwards (column 6, lines 27-28 of Bloomberg). A "large" region implies a predetermined size that is exceeded, namely what is considered to be large with respect to the text characters. Said controller first screens out the image regions that exceed this predetermined size by first removing image regions that are considered large (column 6, lines 16-21 of Bloomberg).

**Regarding claim 7:** Bloomberg discloses communicating the document to be reproduced to an electroreprographic copier, which is a form of printing system (column 6, lines 1-5 of Bloomberg). Communicating said document to said printing system requires submitting a print job in some form since, by definition, a print job is a file or set of files that has been submitted to be printed.

Bloomberg further discloses electronically separating images on the document from text of the print job (figure 12A; figure 12C; and column 5, lines 17-21 of Bloomberg); and printing only the text of the print job (column 5, lines 35-37 of Bloomberg).

**Regarding claim 8:** Bloomberg discloses that the step of separating images on the document from text comprises the step of using an image manipulation device (figure 1A(6(part)) of Bloomberg) in the printing system to separate the images from the text (column 5, lines 17-21 of Bloomberg). The computer processor (figure 1A(6) of Bloomberg) performs the overall image processing of the system (column 5, lines 57-62 of Bloomberg). Therefore, the image manipulation device is the portion of the computer processor, along with the associated embodied software, that performs the operations corresponding to said image manipulation device.

**Regarding claim 10:** Bloomberg discloses a reprographic system (figure 1 of Bloomberg) comprising a first processing unit (figure 1(6(part)) of Bloomberg) for receiving a print job (column 5, lines 5-9 and lines 57-58 of Bloomberg). The image processing system (figure 1 of Bloomberg) is a reprographic system since said system is used to digitally reproduce digital document data (column 5, lines 5-9 and column 6, lines 1-5 of Bloomberg). A wide variety of documents are processed by said reprographic system (column 5, lines 5-9 and column 6, lines 1-5 of Bloomberg). Further, a processor (figure 1(6) of Bloomberg) is used to control the data flow and image processing (column 5, lines 57-58 of Bloomberg). Since the modified document is communicated to the printing device (figure 1(8) of Bloomberg), which is a part of the overall system (column 6, lines 1-5 of Bloomberg), some form of print job must be processed since, by definition, a print job is a file or set of files that has been submitted to be printed. The first processing unit is the portion of said processor, along with the

associated embodied software, that performs the operations corresponding to said first

processing unit.

Said system further comprises a second processing unit (figure 1(6(part)) of

Bloomberg) coupled to the first processing unit for processing the print job (column 5,

lines 56-57 and column 6, lines 1-5 of Bloomberg). The processor (figure 1(6) of

Bloomberg) controls the data flow (column 5, lines 56-57 of Bloomberg), which includes

sending said print data to the printing device (column 6, lines 1-5 of Bloomberg).

Therefore, a portion of said processor processes said print job. The second processing

unit is the portion of said processor, along with the associated embodied software, that

performs the operations corresponding to said second processing unit. Said second

processing unit is operatively coupled to said first processing unit since they are both

part of the processor (figure 1(6) of Bloomberg) and the processing of the print job must

inherently occur after the receipt of said print job. A print job must be received before

said print job can be processed.

Said system further comprises a text only device (figure 1(6(part)) of Bloomberg)

operatively coupled to the second processing unit and adapted to format the print job

into a text only format (column 5, lines 17-21 of Bloomberg). The text only device is the

portion of said processor, along with the associated embodied software, that performs

the operations corresponding to said text only device. Since said second processing

unit processes the print job (column 5, lines 56-57 and column 6, lines 1-5 of

Bloomberg) and said text only device is operatively coupled to said second processing

unit since said text only device modifies said print job (column 5, lines 17-21 of

Bloomberg).

Said system further comprises an image output terminal (figure 1(8) of

Bloomberg) operatively coupled to the second processing unit and controlled by the

second processing unit (column 5, line 66 to column 6, line 2 of Bloomberg) for printing

the text only format of the print job (column 6, lines 10-15 of Bloomberg). The result of

the image processing is communicated to said image output terminal (column 5, line 66

to column 6, line 2 of Bloomberg). Therefore, said image output terminal is operatively

coupled to and controlled by said second processing unit.

**Regarding claim 11:** Bloomberg discloses that said text only device is further

adapted to separate images from text in the print job (column 5, lines 35-38 and column

6, lines 65-68 of Bloomberg).

**Regarding claim 12:** Bloomberg discloses that the text only format includes

only a text portion of the print job and excludes any images of the print job (column 5,

lines 35-37 of Bloomberg).

**Regarding claim 14:** Bloomberg discloses that said text only device is adapted

to convert the scanned image into a bitmap representation of the image (figure 12B;

figure 12C; and column 13, lines 29-34 of Bloomberg). The text regions are separated

from the graphics regions as blocks of the original image (figure 12B; figure 12C; and

column 13, lines 29-34 of Bloomberg). The overall image, including the text regions, is

comprised of binary or grayscale pixels (column 5, lines 49-50 of Bloomberg), and is

thus a bitmap image.

**Regarding claim 15:** Bloomberg discloses that said text only device is adapted

to inhibit a printing of information from a scanned document that exceeds a

predetermined size (column 6, lines 16-21 of Bloomberg). Large ON regions and finely

textured regions are first removed from the image (column 6, lines 16-21 of Bloomberg),

leaving the smaller regions to be processed afterwards (column 6, lines 27-28 of

Bloomberg). A "large" region implies a predetermined size that is exceeded, namely

what is considered to be large with respect to the text characters. Said text only device

first inhibits the printing of information from a scanned document that exceeds this

predetermined size by first removing image regions that are considered large (column 6,

lines 16-21 of Bloomberg).

## *Claim Rejections - 35 USC § 103*

6.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

7.      Claims 2-3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Bloomberg (US Patent 5,202,933) in view of Murata (US Patent 5,748,774).

**Regarding claim 2:** Bloomberg discloses that the text only function is adapted

to separate text from images in the document (column 5, lines 35-38 and column 6,

lines 65-68 of Bloomberg) and send only the text to an image output device for printing

(column 5, line 66 to column 6, line 3 of Bloomberg).

Bloomberg does not disclose expressly an input device adapted to allow the user

to select a text only function of the image manipulation device.

Murata discloses an input device (figure 4 of Murata) adapted to allow the user to

select (column 5, lines 53-56 of Murata) a text only function (column 5, lines 6-11 of

Murata). The user, by selecting an OCR mode (column 5, lines 6-11 of Murata) from

among the selection keys (column 5, lines 53-56 of Murata), causes the device to

perform optical character recognition (OCR) on the entire document (column 5, lines 15-

20 of Murata), thus selecting a text only function since OCR only recognizes and

outputs text.

Bloomberg and Murata are combinable because they are from the same field of

endeavor, namely the processing and printing of scanned image data. At the time of

the invention, it would have been obvious to a person of ordinary skill in the art to

provide an input unit allowing the user to specifically select a text only function, as

taught by Murata. The motivation for doing so would have been that being able to

select among different processing modes can help maintain excellent image

reproductivity (column 6, lines 5-11 of Murata). Therefore, it would have been obvious

to combine Murata with Bloomberg to obtain the invention as specified in claim 2.

**Regarding claim 3:** Bloomberg discloses outputting the processed data to an

optical character recognition system (column 6, lines 1-4 of Bloomberg).

Bloomberg does not disclose expressly that said image manipulation device

comprises an optical character recognition system.

Murata discloses an optical character recognition system for processing the image data (column 5, lines 15-20 of Murata).

Bloomberg and Murata are combinable because they are from the same field of endeavor, namely the processing and printing of scanned image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include an optical character recognition system, as taught by Murata, in the image manipulation device taught by Bloomberg. The motivation for doing so would have been to be able to process character data with the appropriate settings in order to improve image reproductivity (column 6, lines 5-11 of Murata). Therefore, it would have been obvious to combine Murata with Bloomberg to obtain the invention as specified in claim 3.

**Regarding claim 9:** Bloomberg discloses outputting the processed data to an optical character recognition system (column 6, lines 1-4 of Bloomberg); and separating the images from the text in a scanned document (column 5, lines 12-15 of Bloomberg).

Bloomberg does not disclose expressly that said step of separating images on the document from text comprises the step of using an optical character recognition device in the printing system to separate the image from the text.

Murata discloses using an optical character recognition system to process a scanned document (column 5, lines 15-20 of Murata), which therefore results in the extraction of the text from said document.

Bloomberg and Murata are combinable because they are from the same field of endeavor, namely the processing and printing of scanned image data. At the time of

the invention, it would have been obvious to a person of ordinary skill in the art to use

the optical character recognition system taught by Murata to separate text data from

graphics data, as taught by Bloomberg. The motivation for doing so would have been

the OCR reading taught by Murata is performed based on a set of parameters (column

5, lines 15-18 of Murata) which provide excellent image reproductivity (column 6, lines

5-11 of Murata). Therefore, it would have been obvious to combine Murata with

Bloomberg to obtain the invention as specified in claim 9.


8.      Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Bloomberg (US Patent 5,202,933) in view of Li (US Patent 5,506,697).

**Regarding claim 13:** Bloomberg does not disclose expressly that said text only

device is adapted to convert a scanned image in said second processing unit into an

editable text format.

Li discloses converting document image data into an editable text format (column

3, lines 40-46 of Li). "Human readable data on a document" (column 3, lines 40-41 of

Li) includes text (column 4, lines 43-45 of Li).

Bloomberg and Li are combinable because they are from the same field of

endeavor, namely the processing and printing of scanned image data. At the time of

the invention, it would have been obvious to a person of ordinary skill in the art to

convert the text that has been separated from the image, as performed by the system of

Bloomberg, editable text, as taught by Li. The motivation for doing so would have been

to allow a user to modify the contents of the text in a document (column 4, lines 33-36 of

Li).  Therefore, it would have been obvious to combine Li with Bloomberg to obtain the

invention as specified in claim 13.


## Conclusion

9.      The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Baird et al., US Patent 5,647,021, 8 July 1997.

Newman et al., US Patent 6,473,523 B1, 29 October 2002, filed 4 May 1999.


Any inquiry concerning this communication or earlier communications from the

examiner should be directed to James A Thompson whose telephone number is 703-

305-6329.  The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David K Moore can be reached on 703-308-7452.  The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system.  Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

James A. Thompson
Examiner
Art Unit 2624

JAT
August 20, 2004

THOMAS D.
TOMMY LEE
PRIMARY EXAMINER